

ABSTRACT

Silk is purified to eliminate immunogenic components (particularly sericin) and is used to form fabric that is used to form tissue-supporting prosthetic devices for implantation. The fabrics can carry functional groups, drugs, and other biological reagents. Applications include hernia repair, tissue wall reconstruction, and organ support, such as bladder slings. The silk fibers are arranged in parallel and, optionally, intertwined (*e.g.*, twisted) to form a construct; sericin may be extracted at any point during the formation of the fabric, leaving a construct of silk fibroin fibers having excellent tensile strength and other mechanical properties.